GOVERNMENT OF INDIA
AGRICULTURE AND FARMERS WELFARE
LOK SABHA

UNSTARRED QUESTION NO:2689
ANSWERED ON:02.08.2016
Fertility of Soil
Birla Shri Om;Danve Shri Raosaheb Patil;Dubey Shri Nishikant ;Kushwaha Shri Ram Kumar Sharma;Lakhanpal Shri Raghav;Mishra Shri Bhairon Prasad;Rathwa Shri Ramsinh Patalyabhai;Vasava Shri Parbhubhai Nagarbhai

Will the Minister of AGRICULTURE AND FARMERS WELFARE be pleased to state:

(a) whether the Government is aware that large tracts of fertile land have adversely been affected in the country due to depletion, exhaustion, soil erosions and excessive use of chemical fertilizers and if so, the details thereof and the steps/ programmes under taken by the Government for treatment and restoration of actual/original soil fertility;

(b) whether the productivity of crops and the average yield in the country is lowest in the world and if so, the details thereof and the reasons therefor;

(c) whether the organic manures are essential for keeping the soil health good in the country and if so, the details thereof and the steps taken by the Government to use the full potential of organic manure/ urban compost to maintain the quality of soil health;

(d) whether the Government has taken any measures to promote tissue culture to improve quality of soil and enhance agricultural production in the country and if so, the details thereof along with the tissue culture labs. set up/proposed to be set up in the country;

(e) whether the Government has taken any steps to provide training to persons engaged in tissue culture lab./test to improve their skills under various agricultural research institutes across the country and if so, the details thereof and the achievements made in this regard; and

(f) whether there has been a reduction in excessive use of urea in various States including Punjab, Haryana and Rajasthan and if so, the details thereof and the steps taken/being taken by the Government to monitor the use of chemical fertilizers in the field?

Answer

MINISTER OF STATE IN THE MINISTRY OF AGRICULTURE AND FARMERS WELFARE

???? ??? ????? ?????? ???????? ??? ????? ?????? (SHRI PARSHOTTAM RUPALA)

(a) Indian Council of Agricultural Research (ICAR) studies show that there is no harmful effect of chemical fertilizers with recommended doses and judicious use. However, imbalanced use of chemical fertilizers coupled with low addition of organic matter over years may cause multi-nutrient deficiencies.
Contdâ€¦2/-

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The Indian Council of Agricultural Research (ICAR) conducted scientific soil survey for assessing the extent and nature of land degradation across the country. As per the latest estimates (NAAS, 2010) based on harmonized database, around 120.4 million ha of total geographical area of the country is affected by various kinds of land degradation comprising of water erosion (82.6 million ha), wind erosion (12.0 million ha), chemical degradation (24.8 million ha) and physical degradation (1.0 million ha). Out of total degraded area, 104.2 million ha is arable land.

The Government is recommending soil test based balanced and integrated nutrient management through conjunctive use of both inorganic and organic sources (manure, bio-fertilizers etc.) of plant nutrients and location specific soil & water conservation measures for preventing deterioration of soil health and fertility.

'Soil Health Card' (SHC) scheme has been launched in February 2015 to assist State Governments to evaluate fertility in all 14 crore farm holdings and issue soil health cards to farmers regularly in a cycle of 2 years. Soil health cards provide information to farmers on nutrient status of their soil along with recommendations on appropriate dosage of nutrients to be applied for improving soil health and its fertility.

Soil Health Management (SHM) scheme is being implemented to enhance balanced use of fertilizers through setting up / strengthening of Soil Testing Laboratories, demonstration and training on balanced use of fertilizers.

(b): The average yield of principal crops in various countries is given at Annexure-I.

(c): Organic manures/compost not only provide nutrients maintaining soil fertility but also improve soil physical & biological health.

The Indian Council of Agricultural Research (ICAR) has developed technology to prepare various types of organic manures such as phospho-compost, Vermi-compost, bio-enriched compost, municipal solid waste compost, etc. from various organic wastes.

Under National Mission for Sustainable Agriculture, Government is encouraging establishment of fruit / vegetable market / agro waste compost production unit capacity of 3000 ton per annum. Under Capital Investment Subsidy Scheme through National Bank for Agriculture and Rural Development (NABARD), financial assistance is provided @ 33 percent for farmers/ individual private agencies including youth with financial outlay limited to Rs. 63 lakh whichever is less.

The Government has approved a policy on promotion of City Compost. A notification conveying the approval has been issued on 10.02.2016 in which market development assistance in the form of fixed amount of Rs. 1500/tone will be provided for scaling up production and consumption of city compost. The processing and use of city waste as compost fully compliments the "SWACHH BHARAT ABHIYAN" campaign.

(d) & (e): Under Application of Biotechnology in Agriculture component of the Sub-Mission on Seeds and Planting Materials, financial assistance @ Rs.2.50 crores is being provided for establishment of new Tissue Culture Unit and @ Rs. 20 lakh for rehabilitation /strengthening of old Tissue Culture labs to the ICAR Centers, ATMA, State Agricultural Universities (SAUs), Directorates of Agriculture of States, State Seed Corporations, Krishi Vigyan Kendras (KVKs), NSC, Central Universities, Department of Biotechnology identified institutions, and other reputed Institutions of the State contributing to agriculture related scientific applications. Contdâ€¦3/-

Under this scheme Government has established/ strengthened 35 tissue culture labs in the country for production of elite planting material of sugarcane, banana, forest trees, flowers, and medicinal plants.

Besides, there is a provision of financial assistance for capacity building, training of manpower and awareness campaign for up gradation of post release monitoring of GM crops including creating awareness about the Tissue Culture is also provided under the scheme.

Under Mission for Integrated Development of Horticulture (MIDH), assistance is provided for setting up of new TC lab & strengthening of existing TC lab units. For setting up of new TC lab assistance is provided @ 100% for maximum cost of Rs 250 lakh/unit for public sector whereas 40% assistance of maximum cost of Rs. 250 lakhs is provided in case of public sector. In case of strengthening of TC unit assistance is provided @ 100% for maximum cost of Rs. 20 Lakh/unit for public sector whereas 50% assistance of maximum cost of Rs. 20 lakhs is provided in case of public sector.

Besides, under National Food Security Mission (NFSM) support is given to States for setting up tissue culture labs and supply of tissue culture plants of sugarcane @ Rs 3.50 per plant.

(f): The State-wise information on per hectare consumption of Urea Fertilizer during 2012-13 to 2014-15 is given at Annexure-II. At national level the consumption of Urea is constant at around 155 kg per hectare. However, Government of Punjab has reported 0.05% reduction in use of Urea over last year.

In order to reduce the excessive use of urea, Government is promoting adoption of soil test based site specific Integrated Nutrient Management envisaging conjunctive use of both inorganic and organic source (like, bio-fertilizers and locally available organic manures like Farm Yard Manure, compost, Vermi-Compost & Green manure) of plant nutrients to ensure judicious use of fertilizers preventing deterioration of soil health.

In addition, split application and placement of urea, use of slow releasing N-fertilizers and nitrification inhibitors, growing leguminous crops and use of Resource Conservation Technologies (RCTs) are also advocated.

Neem coated urea, which is a slow N release fertilizer and enhance N use efficiency has been made mandatory from May 2015, for all the indigenous producers of urea to produce 100% of their total production of subsidized urea as neem coated urea.